

SPIDERS FROM SOUTH NEW GUINEA IX

BY

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ABSTRACT

In this paper a part of a large collection of spiders, originating from South New Guinea is treated. All specimens have been collected by Br. MONULF in the environs of Merauke (southcoast, 1956/57) and Mindiptana (more inland, 1958—1965).

The following families and species are dealt with:

ECRIBELLATAE (continued). Sicariidae: *Scytodes longipes* Lucas, *S. fusca* Walckenaer, *S. tardigrada* Thorell, *S. pallida* Doleschall. Pholcidae: *Artema atlanta* Walckenaer, *Crosso-priza lyoni* (Blackwall), *Psilochorus nigromaculatus* Kulczynski. Zodariidae: *Storena zebra* Thorell.

CRIBELLATAE. Uloboridae: *Uloborus geniculatus* (Olivier), *U. albofasciatus* nov. spec. Deinopidae: *Deinopis camela* Thorell. Amaurobiidae: *Titanoeca fulmeki* Reimoser. Psecchiidae: *Fecenia angustata* (Thorell), *Psecchus argentatus* (Doleschall).

Introduction

The major part of the collection was discussed in my previous papers, viz., Argyropidae (CHRYSANTHUS, 1958, 1959, 1960, 1961), Tetragnathidae and Theridiidae (1963), Thomisidae (1964), Eusparassidae (1965), Clubionidae, Oxyopidae, Pisauridae and Lycosidae (1967).

Acknowledgements

I wish to express my sincere thanks to the following colleagues who kindly sent me material for study from their respective museums: Dr. L. VAN DER HAMMEN (Rijksmuseum van Natuurlijke Historie, Leiden), Dr. O. KRAUS (Senckenberg-Museum, Frankfurt a.M.), Dr. G. RACK (Zoologisches Museum, Hamburg), Dr. D. GUIGLIA (Museo Civico di Storia Naturale, Genova), Dr. J. F. Jézéquel (Muséum National d'Histoire Naturelle, Paris) and Mr. D. J. CLARK (British Museum, Natural History, London).

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ECRIBELLATAE (continued)

SICARIIDAE

SCYTODINAE

Scytodes Latreille, 1804

Scytodes longipes Lucas, 1845

Fig. 1—5

LUCAS, 1845, Ann. Soc. ent. France, (2) 3: 71, Pl. 1 Fig. 2, ♂.

L. KOCH, 1872, Arachn. Austr. 1 (1): 292, Pl. 24 Fig. 4, ♂ ♀ (*marmorata*).

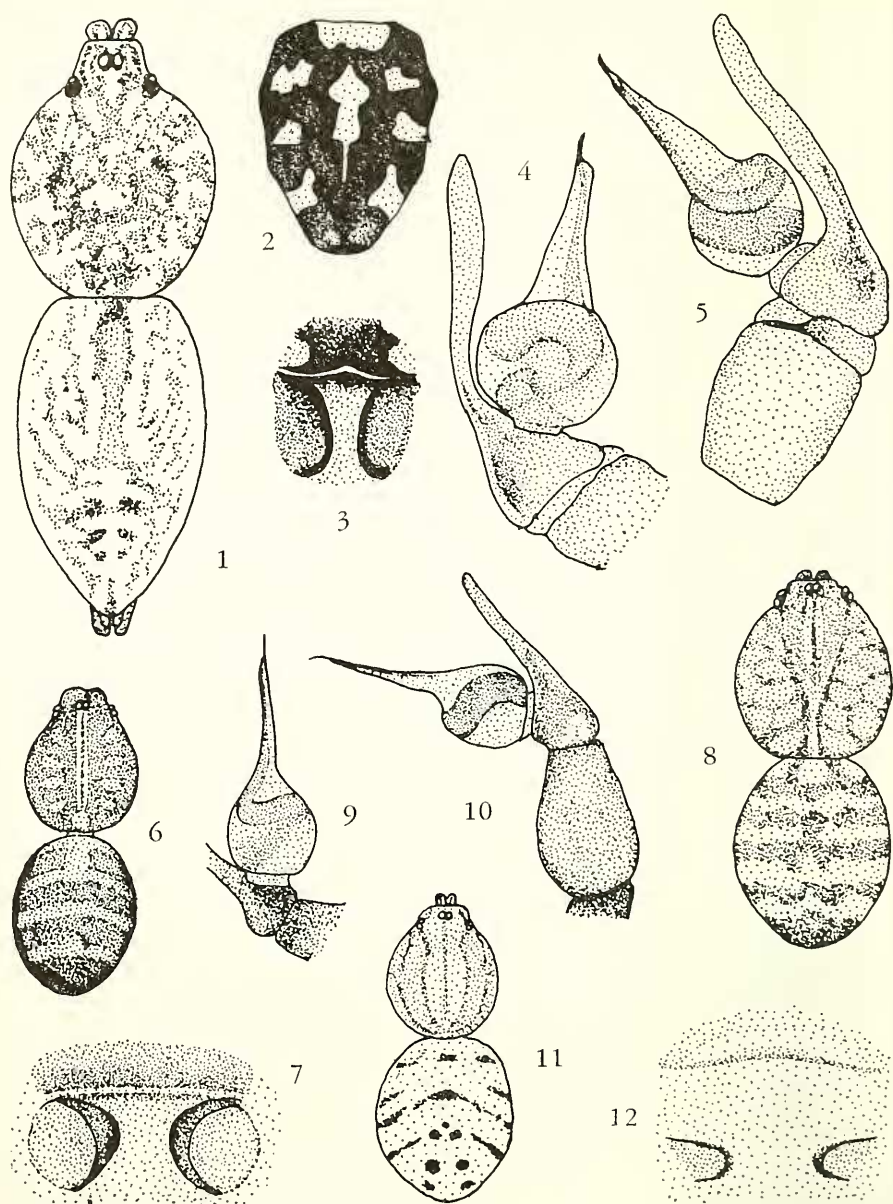


Fig. 1—5. *Scytodes longipes* Lucas. 1, ♀; 2, id. sternum; 3, id. epigyne; 4, id. ♂, left palp, inner side; 5, id. left palp, outside. Fig. 6—10. *S. fusca* Walckenaer. 6, ♀; 7, id. epigyne; 8, id. ♂; 9, id. left palp, inner side; 10, id. left palp, outside. Fig. 11, 12. *S. tardigrada* Thorell, 11, ♀; 12, id. epigyne. Fig. 1, 6, 11: $\times 7$; 2, 3: $\times 13$; 4, 5, 9, 10: $\times 40$; 7, 12: $\times 35$; 8: $\times 10$

THORELL, 1877, Ann. Mus. civ. stor. nat. Genova, 10: 471, ♂ ♀ (*marmorata*).

F. O. PICKARD-CAMBRIDGE, 1899, Biol. Centr. Amer. Zool. 2: 51, Pl. 4 Fig. 1, 2, ♂ ♀.

KULCZYNSKI, 1911, Bull. Acad. Cracovie, 1911: 451, Pl. 21 Fig. 1, 2, 8, 13, ♂ ♀.

Of this pantropical species there are two females and three males in our collection from Merauke (1956/57) and one female from Mindiptana (1965).

The pattern of cephalothorax and abdomen is somewhat variable and the sternum can even be almost completely black; the measurements of the females vary from 11—13 mm, those of the males from 8—11 mm; the legs are extremely long.

Scytodes fusca Walckenaer, 1837

Fig. 6—10

WALCKENAER, 1837, Hist. nat. Ins. Apt. I: 272, ♂ ♀.

DOLESCHALL, 1859, Act. Soc. Sci. Ind.-Neerl. 5: 48, Pl. 8 Fig. 1, ♀ (*domestica*).

THORELL, 1895, Descr. Cat. Spid. Burma: 67, ♂ (*Dictis domestica*).

KULCZYNSKI, 1911, Bull. Ac. Cracovie, 1911: 457, Pl. 21 Fig. 3, 4, 10, 12, ♂ ♀ (*domestica*).

This species also has a pantropical distribution; there are five females (5.0—6.0 mm) and four males (5.0—5.5 mm) in our collection from Merauke (1956/57) and Mindiptana (1958—1965).

The distance between the two deep dents of the "epigyne" may be somewhat larger than given in Fig. 7; the pattern on the cephalothorax is more pronounced in the male than in the female.

Scytodes tardigrada Thorell, 1881

Fig. 11, 12

THORELL, 1881, Ann. Mus. civ. stor. nat. Genova, 17: 181, ♀.

—, 1898, *ibid.* 39: 273.

In his description THORELL (l.c., and again on p. 693) says that the holotype originated from Somerset, Cape York (Australia); the label of this specimen in the Genoa collection has the same indication. In 1898 he mentions two females and two males from Burma. ROEWER (1942: 328) and BONNET (1958: 3990) record Burma as the only area of distribution.

There are four females (4.5—5.5 mm) in our collection from Merauke (1956—1957).

Scytodes pallida Doleschall, 1859

Fig. 13, 14

DOLESCHALL, 1859, Act. Soc. Sci. Ind.-Neerl. 5: 48, Pl. 6 Fig. 3, ♀.

DOLESCHALL's latin description of this species is very short: "Pallide flavescens, thorace gibbosissimo et ut abdomine tenerrime nigro striato; ventre et pedibus flavis, his tenerrime nigro annulatis. Long 2'''."

The Dutch description, on the same page (translated) runs as follows: "The cephalothorax, especially the posterior part, very high. All six eyes of equal dia-

meter. In the middle of the dorsal part two parallel black, very fine lines; the other lines run obliquely from the outer part inwards. The abdomen round, on the anterior dorsal part five to six black longitudinal lines and thereafter some rather short transverse lines. The legs are very slender, much longer than the body, 1. 4. 2. 3. Habit. Amboina". The accompanying figure is small but rather clear.

I was able to study the holotype (Rijksmuseum van Natuurlijke Historie, Leiden). In this specimen the dark lines on the cephalothorax are still sufficiently visible, whereas on the abdomen they have disappeared. Black longitudinal lines on all legs, not mentioned by DOLESCHALL, are conspicuous. The epigyne is very vague.

Two *Scytodes* females from Mindiptana (1958, 1965) certainly belong to this species: they fully agree with the description, the figure and the holotype. Length of our specimens about 7 mm (in both the abdomen is damaged).

The species is known from India, Amboina and the Philippines (ROEWER, 1942: 328; BONNET, 1958: 3988).

PHOLCIDAE

PHOLCINAE

Artema Walckenaer, 1837

Artema atlanta Walckenaer, 1837

Fig. 15—19

Spiders belonging to the genus *Artema* are easily recognizable on account of their very characteristic general appearance. The problem, however, of the number of genuine species, and the geographical distribution of these, appears not to be easy to solve. Much discussion is still going on about the synonymy, which becomes evident when consulting ROEWER, 1942: 333—334 and BONNET, 1955: 745—747.

The oldest descriptions are:

- 1837 *A. atlanta* WALCKENAER, Hist. Nat. Ins. Apt. I: 656 (from Brazil)*)
- A. mauriciana* WALCKENAER, *ibid.*: 657 (from Mauritius)*)
- 1857 *Pholcus sisypoides* DOLESCHALL, Nat. Tijdschr. Ned.-Ind. 13: 408 (from Amboina)
- 1858 *A. convexa* BLACKWALL, Ann. Mag. Nat. Hist. (3) 2: 333, ♀ (from Pernambuco)
- 1866 *A. convexa* BLACKWALL, *ibid.* (3) 18: 459, ♂ (from S.E. Equat. Africa)
- 1863 *Pholcus Borbonicus* VINSON, Aranéides des îles de la Réunion, Maurice et Madagascar: 132 (from Réunion)
- A. mauritia* Walckenaer, VINSON, *ibid.*: 141 (from Mauritius)
- 1875 *Pholcus Borbonicus* Vinson, L. KOCH, Aegyptische und Abyssinische Arachniden: 25 (from Erythrea).

Further publications concerning this problem are:

- 1867 BLACKWALL, Ann. Mag. Nat. Hist. (3) 19: 394
- 1881 THORELL, Ann. Mus. civ. stor. nat. Genova, 17: 179
- 1893 SIMON, Histoire Naturelle des Araignées, 2d ed.: 465
- 1901 KULCZYNSKI, Mém. et C.R. Section Math. Sci. Nat. Acad. Sci. Cracovie, 41: 19
- 1902 F. O. PICKARD-CAMBRIDGE, Arachnida in Biol. Centr. Amer. Zool.: 336
- 1928 ROEWER, Abh. naturw. Ver. Bremen, 27: 121
- 1934 SPASSKY, Bull. Mus. hist. nat. (2) 6: 369
- 1935 DYAL, Bull. Dep. Zool. Panjab Univ. 1: 170
- 1940 KRATOCHVIL, Act. Soc. Sci. Nat. Morav. 12: 6.

*) The original names of WALCKENAER have been often misspelled by subsequent authors.

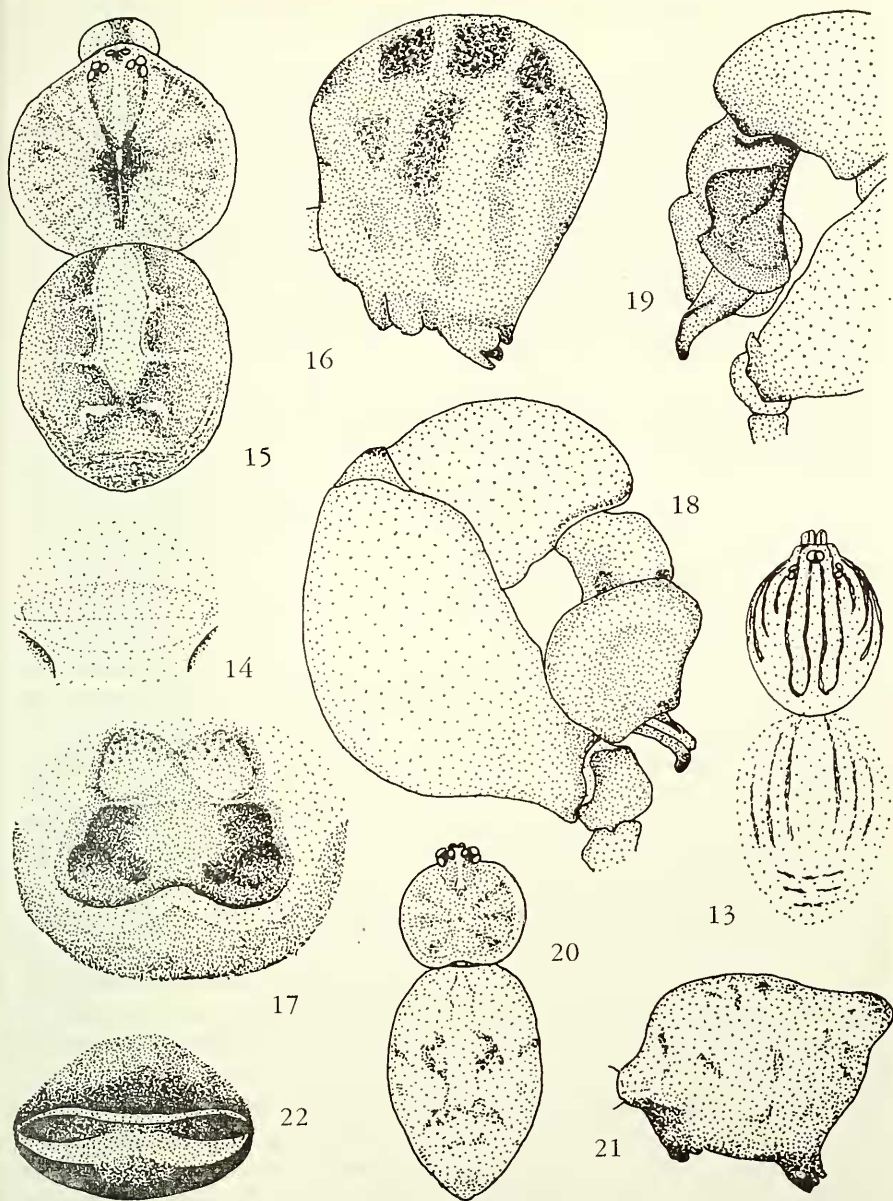


Fig. 13, 14. *Scytodes pallida* Doleschall, 13, ♀; 14, id. epigyne. Fig. 15—19. *Artema atlanta* Walckenaer, 15, ♀; 16, id. abdomen, lateral view; 17, id. epigyne; 18, id. ♂, left palp, inner side; 19, id. left palp, outside. Fig. 20—22. *Crossopriza lyoni* (Blackwall), 20, ♀; 21, id. abdomen, lateral view; 22, id. epigyne. Fig. 13, 15, 16, 20, 21: $\times 7$; 14: $\times 25$; 17: $\times 13$; 18, 19: $\times 20$; 22: $\times 35$

WALCKENAER mentions the following differences between *atlanta* and *mauriciana*:

(a) (Chez l'*Artema atlanta*) "... la lèvre ... se termine en pointe arrondie, et n'est pas tronquée comme dans l'*Artème mauricienne*" (p. 656/7).

(b) In the male palp of *A. atlanta* "... le digital projette de côté un conjoncteur rougeâtre, cylindrique, auquel est joint un conjoncteur supplémentaire, échancré et dilaté vers le bout. Un deuxième conjoncteur supplémentaire se remarque entre les deux corps dilatés. Il est fin, peu allongé, rougeâtre, doublement recourbé ou ayant la forme d'une S." (p. 657).

In the male palp of *A. mauriciana* "Digital ... se terminant par un conjoncteur en spirale" (p. 657) — Does this "spirale" differ from "la forme d'une S"?

Figure 1 A on Planche 15 (male palp of *A. mauriciana*) is so small and superficially drawn that it does not give any useful information.

The descriptions given by DOLESCHALL and VINSON are short and very superficial; the only important character mentioned by VINSON for *A. mauritia* Walck. is "Digital des palpes ... se terminant par un conjoncteur en spirale" (p. 141).

About the ♀ of *convexa* BLACKWALL says "the sexual organs are highly developed and prominent; the colour of the anterior part is dark reddish-brown, and that of the posterior part pale red brown" (1857: 333). In his description of the ♂ (1866: 459/460) this author gives several details of the palp which are important for the recognition of the species. In 1867 he discusses a collection of spiders from India. "Specimens of both sexes of *A. convexa* ... were contained in the collection. ... I have received specimens of this *Artema* from Pernambuco and from Equatorial Africa; and the curious fact of its very extensive geographical distribution is rendered the more surprising by the circumstance of its being a spider that commonly inhabits the interior of buildings" (p. 394).

L. KOCH (1875: 25/26) elaborately describes a female from Massawa, Erythrea, as *Pholcus Borbonicus* Vinson; he does not give any information about the epigyne.

THORELL (1881: 179/180 note) indicates several, though slight, differences between the male and female copulatory organs of *Borbonicus* Vinson, *convexa* Blackwall (= *sisyphoides* Dol.) and *Borbonicus* L. Koch. Moreover he mentions three specimens (only one adult ♀) from Persia, gives some characters of the epigyne by which it differs from those of the preceding species, and names it "*Pholcus Doriae*". This, therefore, is not a nomen nudum as BONNET believes (1955: 746).

SIMON (1893: 465) writes: "On en (= within the genus *Artema*) connaît un petit nombre d'espèces, très voisines les unes des autres, et toutes largement distribuées: *A. mauricia* Walck. est répandu dans presque toute l'Afrique, depuis la Tunisie et l'Égypte, jusqu'à Madagascar, dans l'Arabie et l'Asie tropicale; *A. sisyphoides* Dolsch., dans la Malaisie et la Polynésie; *A. atlanta* Walck., dans l'Amérique du Sud et les Antilles; *A. Doriai* Th., en Perse et dans l'Asie centrale (1).

(1) Ces espèces sont extrêmement voisines les unes des autres [cf. à ce sujet Thorell, St. Rag. Mal., etc., III, p. 180 (note)] et leur synonymie est très obscure: à celle d' *A. mauricia* Walck., se rapportent *Pholcus borbonicus* Vinson et *Pholcus convexus* Blackw. (ad part.), à celle d' *A. atlanta* Walck., *Pholcus convexus*

Blackw. (ad part.) et probablement *Ph. rotundatus* Karsch [1879: 106, from Santa Marta, Colombia]."

F. PICKARD-CAMBRIDGE studied material from several widely separated regions and came to the following conclusion (1902: 336): "Only one species occurs in Central America, and it is quite cosmopolitan, being found all over the Neotropical and Palaetropical Regions. This spider has been described under various names by different authors; but having minutely examined numerous examples of it in the British Museum Collection, from the Antilles, the Amazons, Mauritius, East Indies (Karachi and Poona) and the Malay Archipelago, I am convinced that they are identical. There are slight individual differences, it is true, in the form of the chitinous processes on the male palpus, and also in the exact position of the eyes, but these characters cannot, in my opinion, be regarded as of specific importance.

E. SIMON considers *A. atlanta* and *A. mauriciana* to be different species; but examples from St. Vincent (Antilles), identified by him as *A. atlanta*, are identical with others from Mauritius, and also with the large number taken by me at Santarem, on the Lower Amazons."

He recognizes only one species: *Artema atlanta* Walckenaer.

KULCZYNSKI (1901: 19—20; Pl. 1 Fig. 14, 15) considers *borbonicus* Vinson and *sisyphoides* Dol. synonyms of *mauritiana* Walck.; he gives a new name, *A. kochii*, to *borbonicus* sensu L. KOCH (1875) and THORELL (1881), indicating some differences between the epigynes of the two species. PICKARD-CAMBRIDGE does not mention this publication, which appeared only one year before his work in "Biologia Centrali-Americana": I therefore believe that he did not know it.

DYAL (1935: 170; Pl. 15 Fig. 97—103) believes that the species occurring in India, Burma and Indonesia (*sisyphoides*) is identical with *atlanta*; his description and figures, however, are not very clear.

ROEWER (1928: 121; Pl. 2 Fig. 31—34) describes a new species from Creta, *A. cretica*, for which KRATOCHVIL (1940: 6) erects a new genus: *Neartema*. "Diese Art der *A. mauriciana* Walck. gleich in den Gattungsmerkmalen, doch das ♂ durch den Bau des Palpus [Fig. 33] und das ♀ durch anders gebaute Epigyne [Fig. 32] unterscheiden".

SPASSKY (1934: 369; Fig. 8—10) describes a new species from Turkestan, *A. transcaspica*. Judging from the description and the figures it strongly resembles *atlanta*, although there seem to be differences in the copulatory organs. As the author does not even refer to the last mentioned species, only a study of the types can clear up its position within the group.

I was able to study the following specimens:

- (a) *Pholcus sisyphoides* Doleschall, ♂ holotype, from Amboina (RMNH, Leiden).
- (b) *Artema sisyphoides* (Doleschall), ♀ ♂, from the Sandwich Is. identified by SIMON in 1899, six years after his Hist. Nat. Ar. (SMF 4934).
- (c) *Artema mauricia* Walckenaer, ♀ ♂, from Curacao, identified by VAN HASSELT (RMNH, Leiden).
- (d) One ♀ and one ♂ from Merauke, South New Guinea (1956/1957).
- (e) Several ♀ and ♂ from Mahenge district, Tanzania (leg. FR. CANTIAN 1964).

In all specimens the copulatory organs, male and female, are absolutely identical and fully agree with the figures given by SIMON for *A. mauricia* Walck. (1893: Fig. 451—454) and with those given by PICKARD-CAMBRIDGE for *A. atlanta* Walck. (1902: Pl. 34 Fig. 15, 15a, 15b, 16a). The pattern of the abdomen is generally more distinct; Fig. 21 gives an idea of its shape (lateral view).

CONCLUSIONS

- (1) There exists only one pantropical species: *A. atlanta* Walck.
- (2) *A. doriae* (Thorell, 1881 from Persia), *A. transcaspica* Spassky, 1934 (from Turkestan) and *A. kochii* Kulc., 1901 (= *borbonicus* sensu L. KOCH and THORELL, from Erythrea) are probably synonyms of *atlanta* or at the best, subspecies.
- (3) *Neartema cretica* (Roewer, 1928) is a different species.

Crossopriza Simon, 1893

Crossopriza lyoni (Blackwall, 1867)

Fig. 20—24

BLACKWALL, 1867, Ann. Mag. Nat. Hist. (3) 19: 392, ♂ ♀ (*Pholcus*).

THORELL, 1895, Descr. Cat. Spiders Burma: 70, ♂ (*Smeringopus*).

POCOCK, 1900, Fauna British India, Arachnida: 240, ♂ ♀.

DYAL, 1935, Bull. Dep. Zool. Panjab Univ. 1: 168; Pl. 15, Fig. 90—96, ♂ ♀.

Until very recently this species was only known from India, Burma and South China (ROEWER, 1942: 334; BONNET, 1956: 1250); five females from Merauke (1956—1957) prove that it also occurs in New Guinea.

Through the kindness of Mr. D. J. CLARK, of the British Museum (Natural History), London, I was able to study several females and one male of this species from East Khandesh (India); as the figure of the male palp given by DYAL is rather poor I add a figure of this palp (Fig. 23, 24).

Psilochorus Simon, 1893

Psilochorus nigromaculatus Kulczynski, 1911

Fig. 25—28

KULCZYNSKI, 1911, Nova Guinea, 3: 436, Pl. 19 Fig. 12, 13, ♂.

Three very small female Pholcidae from Mindiptana (1959) possess the characters of the present genus as given by SIMON, agreeing in nearly all details with KULCZYNSKI's description of the male of this species (Manikion, Vogelkop, Northwest New Guinea). Therefore I am certain that these females belong to the same species.

Female. Cephalothorax (Fig. 25): length 0.8 mm, width 1.0 mm; brownish-yellow, the darker parts brown; clypeus very long and strongly protruding. Eyes: Fig. 26. Legs: partly or completely broken off.

Abdomen (Fig. 25): length 1.3 mm, width 1.1 mm; brownish-yellow with black spots; lateral view Fig. 28; ventral view Fig. 27.

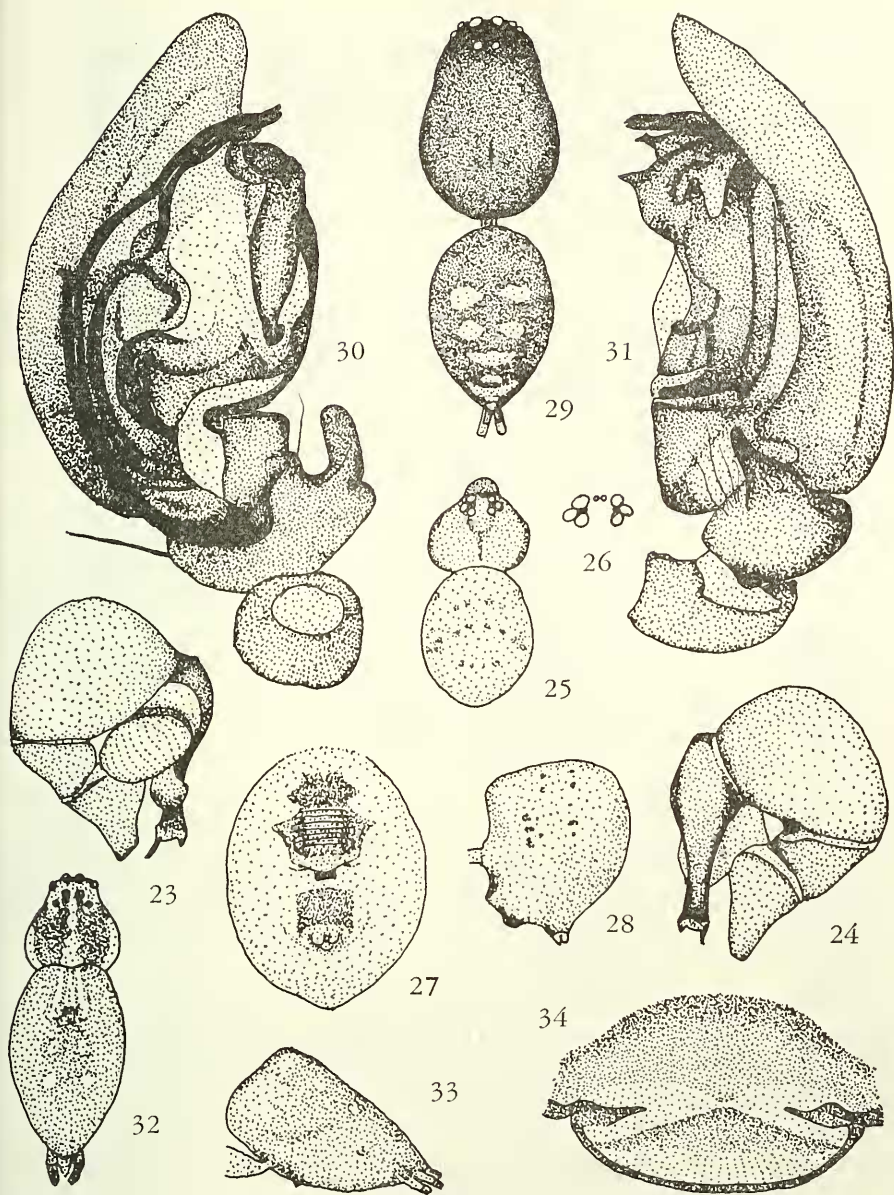


Fig. 23, 24. *Crossopriza lyoni* (Blackwall), ♂. 23, left palp, inner side; 24, id. left palp, outside. Fig. 25—28. *Psilochorus nigromaculatus* Kulczynski. 25, ♀; 26, id. eyes; 27, id. abdomen, underside; 28, id. abdomen, lateral view. Fig. 29—31. *Storena zebra* Thorell. 29, ♂; 30, id. left palp, underside; 31, id. left palp, lateral view. Fig. 32—34. *Uloborus geniculatus* (Olivier). 32, ♀; 33, id. abdomen, lateral view; 34, epigyne. Fig. 23, 24, 26: $\times 20$; 25, 28: $\times 13$; 27: $\times 25$; 29, 32, 33: $\times 7$; 30, 31: $\times 40$; 34: $\times 75$

ZODARIIDAE

ZODARIINAE

Storena Walckenaer, 1805*Storena zebra* Thorell, 1881

Fig. 29—31

THORELL, 1881, Ann. Mus. civ. stor. nat. Genova 17: 185, ♂.

———, 1890, ibid. 28: 331, ♂ ♀ (*vittata*).

MERIAN, 1911, Zool. Jahrb. Syst. 31: 173, Fig. B 1, ♂.

Several males of this species, but no females, were captured in the environs of Merauke (1956/57) and Mindiptana (1958—1962); they are identical with the types (Genoa) and measure 6—8 mm.

The type locality of the species is Aru Is., its area of distribution extends from Sumatra to New Guinea (ROEWER, 1942: 361; BONNET, 1958: 4182).

CRIBELLATAE

ULOBORIDAE

ULOBORINAE

Uloborus Latreille, 1806*Uloborus geniculatus* (Olivier, 1789)

Fig. 32—39

OLIVIER, 1789, Araignée, Aranea, Encycl. méth. Hist. nat. Ins. Paris 4: 214 (*Aranea*).DOLESCHALL, 1859, Act. Soc. Sci. Ind.-Neerl. 5: 46, Pl. 7 Fig. 2, ♀ (*domesticus*).BLACKWALL, 1861, Ann. Mag. Nat. Hist. (3) 8: 443, ♂ (*Orithya williamsii*).L. KOCH, 1872, Die Arachniden Australiens, 1 (1): 221; Pl. 19 Fig. 3, ♀ (*Zosis*).THORELL, 1878, Ann. Mus. civ. stor. nat. Genova, 13: 129, ♀ ♂ (*Zosis*).

F. O. PICKARD-CAMBRIDGE, 1902, Biol. Centr. Amer. Zool. 2: 362, Pl. 34 fig. 9—10 ♂ ♀.

Of this pantropical species several females and males have been captured in the environs of Merauke (1956—1957) and Mindiptana (1960—1965). In some females the pattern of the cephalothorax is as in the males. The measurements are: females 5.5—7.0 mm, males 4.5—5.0 mm.

Uloborus albofasciatus nov. spec.

Fig. 40—44

Most species in this genus (about 50 from the Indo-Australian region — ROEWER, 1954: 1335—1342) are rather inconspicuous, with abdomens of a dull, greyish-brown colour with some darker and brighter blots.

The present species is remarkable on account of the white longitudinal streak along the abdomen and in this respect resembles *U. bilaris* Simon, 1906 (*Ann. Soc. Ent. Belg.* 50: 286).

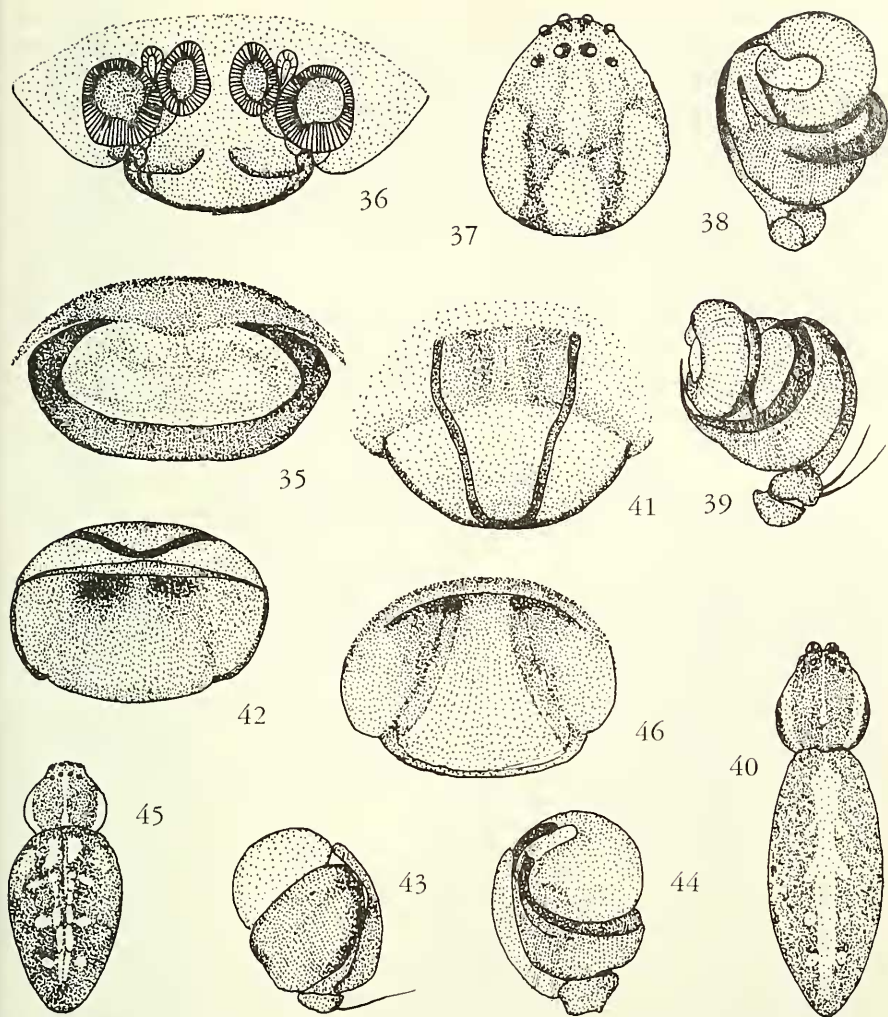


Fig. 35—39. *Uloborus geniculatus* (Olivier). 35, ♀, epigyne, from behind; 36, id. vulva; 37, id. ♂, cephalothorax; 38, id. ♂, left palp, underside; 39, id. left palp, lateral view. Fig. 40—44. *U. albofasciatus* nov. spec. 40, ♀; 41, id. epigyne; 42, id. epigyne from behind; 43, id. ♂, left palp, lateral view; 44, id. left palp, underside. Fig. 45—46. *U. bilaris* Simon. 45, ♀; 46, id. epigyne. Fig. 35, 41, 42, 46: $\times 75$; 36, 38, 39, 43, 44: $\times 60$; 37: $\times 13$; 40, 45: $\times 7$

Female (holotype) — Cephalothorax (Fig. 40): length 2.1 mm, width 1.8 mm, brown, a narrow median streak and broader lateral ones yellowish-white. Eyes: width of the posterior row 1.0 mm. Chelicerae: brownish-yellow with longitudinal brown streaks. Maxillae and labium: brown with whitish borders. Sternum: length 1.2 mm, width 0.8 mm, brownish-yellow with brown blots opposite the coxae. Palpi and legs: brown with several sharply contrasting whitish rings. Dimensions of the legs: I 12.5, II 6.5, III 5.0, IV 8.5 mm.

Abdomen (Fig. 40): length 5.2 mm, width 2.3 mm, brown with a yellowish-white longitudinal streak. Underside brown with a broad greyish median part. Spinnerets yellowish-brown. Epigyne: Fig. 41, 42.

Male (allotype) — Colour and pattern as in the female, the white streaks on cephalothorax and abdomen broader. Measurements. Cephalothorax: length 1.8 mm, width 1.5 mm. Eyes: width of the posterior row 0.8 mm. Sternum: length 0.9 mm, width 0.5 mm. Legs: I 11.0, II 5.0, III 4.0, IV 7.0 mm. Palp: Fig. 43, 44. Abdomen: length 3.0 mm, width 1.5 mm.

The species has been captured by BR. MONULF in the environs of Mindiptana (♀ 1958, ♂ 1959); the material is now in the Rijksmuseum van Natuurlijke Historie, Leiden.

Through the kindness of Dr. J. F. JÉZÉQUEL (Muséum National d'Histoire Naturelle, Paris) I was able to study *U. bilaris* Simon (two females and two males from the type locality, South India). As already indicated, *albofasciatus* resembles this species (Fig. 45); the epigyne of *albofasciatus*, which is quite different when viewed from above (Fig. 41, 46) resembles that of *bilaris* (in caudal aspect, looking far from behind) (Fig. 42). The palpi of all *Ulobornus* males are simple and, therefore, very much alike; a more useful character of the *bilaris* male is the circular and nearly spherical cephalothorax, which is uniformly orange-coloured.

DEINOPIDAE

Deinopsis MacLeay, 1839

Deinopsis camela Thorell, 1881

Fig. 47—51

THORELL, 1881, Ann. Mus. civ. stor. nat. Genova, 17: 194, ♀.

A female from Mindiptana (1960/62) fully agrees with the original material: the two females from Yule I. (Museum Genoa) were the only specimens so far known; it measures 30 mm, whereas the types are 28.5 and 31 mm. The epigyne is almost totally hidden under long hairs. A young female from Mindiptana (1958) is identical with it.

There are three *Deinopsis* males in the collection: one from Merauke (1956/1957) and two from Mindiptana (1959); their measurements vary from 16.5—24.0 mm, but in all other respects they are identical. Shape and pattern (Fig. 49, 50) differ from those of the female but in another young female (Merauke, 1956/1957) the characters of the adult female, viz., two humps in the middle of the abdomen and the anchor-shaped patch on the cephalic part, are combined with

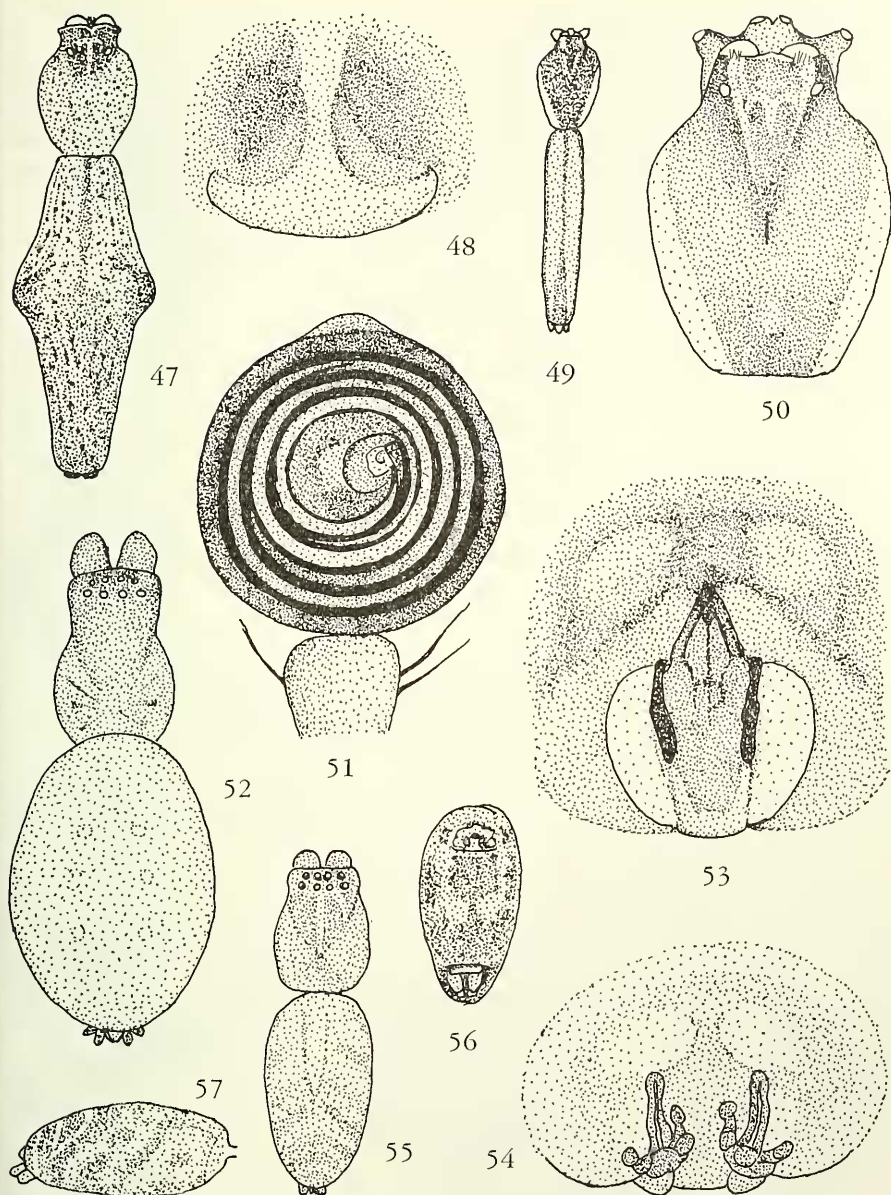


Fig. 47—51. *Deinopis camela* Thorell. 47, ♀ ($\times 2$); 48, id. epigyne ($\times 40$); 49, id. ♂ ($\times 1\frac{1}{2}$); 50, id. cephalothorax ($\times 7$); 51, id. left palp, underside ($\times 20$). Fig. 52—54. *Titanoeca fulmeki* Reimoser. 52, ♀ ($\times 7$); 53, id. epigyne ($\times 75$); 54, id. vulva ($\times 60$). Fig. 55—57. *Fecenia angustata* (Thorell). 55, ♀ ($\times 3$); 56, id. abdomen, underside ($\times 3$); 57, id. abdomen, lateral view ($\times 3$).

the pattern of the cephalothorax of these males. I am therefore certain that these males belong to *D. camela*.

Male. Cephalothorax (Fig. 50): length 7.0 mm, width 4.7 mm; brown, the light parts grey, the anchor-shaped blot on the cephalic part orange. Eyes: Fig. 50. Sternum: triangular, length 3.2 mm, width 2.8 mm; the median triangular part yellow, the borders dark brown. Legs: dark brown, I 65, II 55, III 30, IV 38 mm. Palp: Fig. 51. Abdomen (Fig. 49): length 15 mm, width 3 mm; brownish-yellow with a brown median band; underside dark brown.

AMAUROBIIDAE

Titanoeca Thorell, 1869

Titanoeca fulmeki Reimoser, 1927

Fig. 52—54, 58, 59

REIMOSER, 1927, Misc. Zool. Sumatrana 13: 1, Fig. 1, ♀.

Several females collected at Mindiptana (1959—1965), some indoors, prove that the species does not only occur in the type locality, Sumatra, but also in New Guinea. The Museo Civico di Storia Naturale, Genoa, possesses many specimens identified by REIMOSER; our specimens are identical with them. REIMOSER's figure of the epigyne is rather superficially drawn. The measurements of the females vary from 6.5—9.0 mm; in two small specimens cephalothorax and abdomen are very dark brown; the epigyne, also totally dark brown, is not so distinct as in the others; the vulva, however, is the same.

There are one adult and two subadult males in our collection, certainly belonging to the same species; one subadult male was taken together with a female.

Male. Shape as in the female. Cephalothorax: length 3.7 mm, width 2.4 mm; cephalic part brown, thoracic part yellowish-brown; chelicerae dark brown. Sternum: length 1.9 mm, width 1.3 mm, brownish-yellow with brown borders, brown hairs are scattered over its surface. Legs: I 13, II 12, III 10, IV 12 mm, yellowish-brown. Palp: Fig. 58, 59. Abdomen: length 3.5 mm, width 2.0 mm, greyish-yellow, rather densely set with long brown hairs.

PSECHRIDAE

Fecenia Simon, 1887

Fecenia angustata (Thorell, 1881)

Fig. 55—57, 60—64

THORELL, 1881, Ann. Mus. civ. stor. nat. Genova, 17: 204, ♀ (*Mezentia*).

I compared a large number of *Fecenia* females from Merauke (1956/1957) and a few from Mindiptana (1959, 1965) with specimens of two closely related species, viz., *F. angustata* Thorell (holotype from Ternate, Genoa Museum, sketch

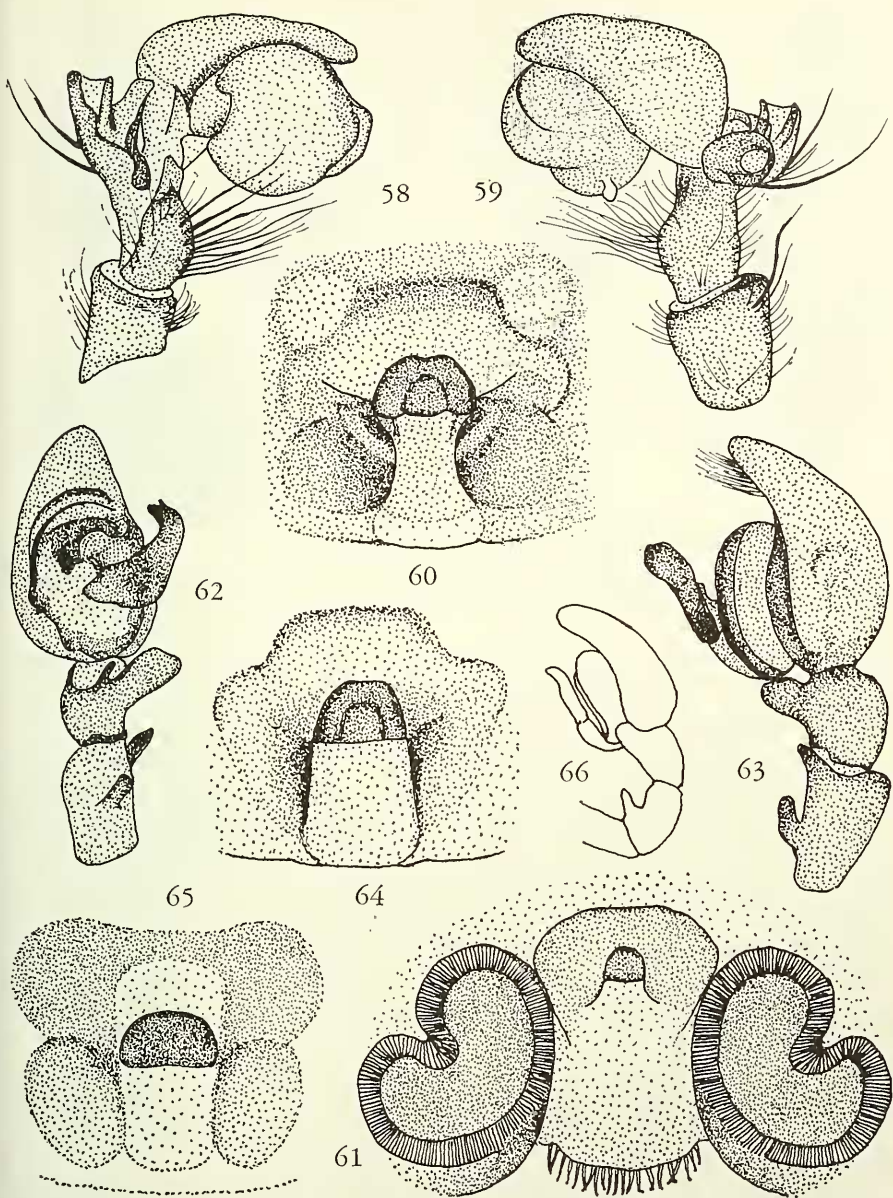


Fig. 58—59. *Titanoeca fulmeki* Reimoser, ♂. 58, left palp, inner side; 59, id. left palp, outside. Fig. 60—64. *Fecenia angustata* (Thorell), ♀. 60, epigyne; 61, id. vulva; 62, id. ♂, left palp, underside; 63, id. left palp, lateral view; 64, id. holotype, sketch of epigyne. Fig. 65. *F. masurensis* Simon (sensu STRAND), ♀, sketch of epigyne. Fig. 66. *F. buruana* Reimoser, ♂, sketch of left palp, lateral view (after REIMOSER). Fig. 58—60: $\times 40$; 61: $\times 60$; 62, 63: $\times 20$

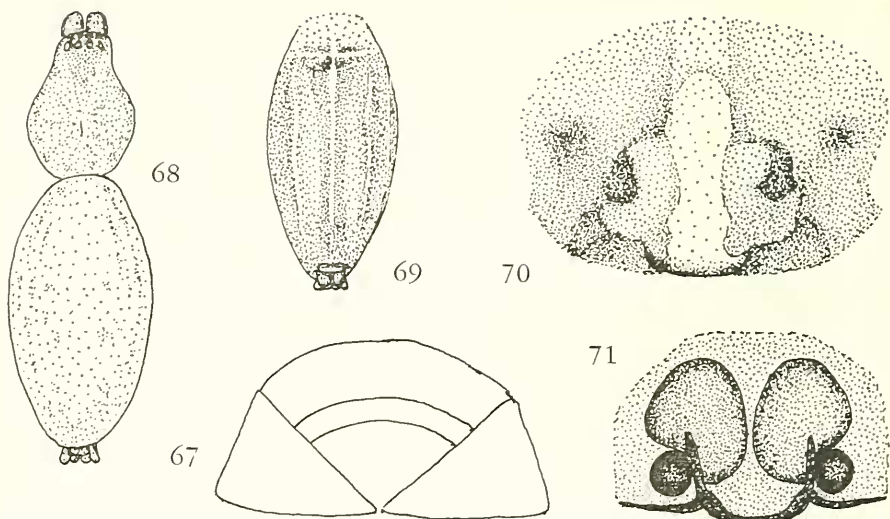


Fig. 67. *Fecenia buruana* Reimoser, ♀, sketch of epigyne (after REIMOSER). Fig. 68—71. *Psecbrus argentatus* (Dolleschall). 68, ♀ ($\times 2$); 69, id. abdomen, underside ($\times 2$); 70, id. epigyne ($\times 35$); 71, id. vulva ($\times 20$)

of the epigyne Fig. 64) and *F. maforensis* Simon (from Anir, Bismarck Arch., identified by STRAND, Senckenberg-Museum, SMF 2769, sketch of its epigyne Fig. 65). In colour and pattern they are all alike (cf. Fig. 55—57).

As the receptacula are not always clearly visible i.e., not always to the same extent show through the skin, this part of the epigyne appears to be somewhat variable. Moreover, in several of our specimens the tongue-shaped central part has parallel borders, whereas in some specimens the anterior part is almost totally reddish-brown; in all, however, the arrow-shaped anterior border, flanked by two brighter blots, is characteristic. I am, therefore, certain that they belong to *F. angustata*. This species has also been recorded from Neu Pommern (= New Britain, Bismarck Arch.) (ROEWER, 1954: 1377; BONNET, 1956: 1896).

Among the large number of females there is only one male, hitherto unknown (Mindiptana, 1959).

Male. Colour (greyish-yellow) and pattern (brownish) as in the female (Fig. 55—57); abdomen hairy. Cephalothorax: length 4.5 mm, width 3.2 mm. Sternum: length 1.7 mm, width 1.5 mm. Abdomen: length 5.0 mm, width 2.2 mm. Legs: I 48, II 25, III 14, IV 22 mm. Palp: Fig. 62, 63.

The figure of the male palp of *F. buruana* Reimoser from Buru, given by its author (1936, *Treubia*, 7 [Suppl.]: Fig. 1b = our Fig. 66), is almost identical with Fig. 63, whereas his sketchy figure of the epigyne of the same species (Fig. 1a = our Fig. 67) suggests rather great differences between these two species. The vulvae of the types of *angustata*, *maforensis* and *buruana* would be worth studying. I should not be surprised if all of them turned out to be identical; the area of *angustata* would then extend from Ternate and Buru to the Bismarck Is.

Psechrus Thorell, 1878**Psechrus argentatus** (Doleschall, 1859)

Fig. 68—71

DOLESCHALL, 1857, Nat. Tijdschr. Ned.-Ind. 13: 407, ♀ (*Tegenaria*).——, 1859, Act. Soc. Sci. Ind.-Neerl. 5: 49; Pl. 8 Fig. 9, ♀ (*Tegenaria*).

THORELL, 1878, Ann. Mus. civ. stor. nat. Genova, 13: 171, ♀.

——, 1881, *ibid.* 17: 207, ♂.

SIMON, 1891, Hist. natur. Araignées, Paris 1: 226; Fig. 168—170, ♂.

KULCZYNSKI, 1908, Bull. intern. Ac. Sci. Cracov, 1908: 561; Pl. 23 Fig. 30, ♀.

Our collection contains several young specimens of this species but only one adult female (29.5 mm), all from Mindiptana (1958/1959). The epigyne is almost totally hidden under hairs; the vulva (Fig. 71) has been drawn after a female from Ceram, identified by THORELL (Genoa). The type locality of *argentatus* is Amboina; its area extends from Malaya to the Bismarck Is. (ROEWER, 1954: 1378; BONNET, 1958: 3803).

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